CLAIMS

1. Use of coenzyme ubiquinone Q10 for the production of a drug for ophthalmic topical use for the prevention and treatment of pathologies, or incidental or post-surgical trauma, of the anterior chamber of the eye.

2. Use of ubiquinone Q10 according to claim 1, wherein said treatment comprises prevention and treatment of corneal haze following corneal trauma, general surgery and refractive surgery; prevention of regression of corrective effects after operation of refractive surgery performed by conventional surgery or by laser radiation; and eye protection against damage determined by solar light and ultraviolet radiation.

3. Use of ubiquinone Q10 according to claim 1 or 2, wherein said treatment is directed to protect eye cells against reversible or irreversible damage induced by said surgical operation and, or laser and by exposure to solar and ultraviolet radiation.

4. Use of ubiquinone Q10 according to any of the preceding claims, wherein said irreversible damage of said cells is apoptosis.

5. Use of ubiquinone Q10 according to any of the preceding claims, wherein said cells are corneal stromal keratocytes.

6. Use of ubiquinone Q10 according to any of the preceding claims, wherein said corneal surgery is the photorefractive keratectomy (PRK) and the laser-assisted in situ keratomileusis (LASIK).

7. Use of ubiquinone Q10 according to claim 6, wherein said photorefractive keratectomy (PRK) and said laser-assisted in situ keratomileusis (LASIK) are performed by laser sources.

8. Use of ubiquinone Q10 according to claim 7, wherein said laser sources are excimer laser.

9. Use of ubiquinone Q10 according to claim 8, wherein said laser source is a 193 nm ArF excimer laser.

10. Use of ubiquinone Q10 according to any of the preceding claims, wherein said medicament comprises a composition for topical administration to the cornea, including ubiquinone Q10 in a quantity effective to said treatment and a pharmaceutically compatible vehicle.

11. Use of ubiquinone Q10 according to claim 10, wherein said vehicle is an aqueous solution of a mixture comprising: a block copolymer of hydrophilic ethylene oxide and lipophilic propylene oxide, having a prevailing proportion of polyoxyethylene, an average molecular weight between 10.000 and 13.000 Dalton and a HLB value higher than 15; and a modified castor oil.

12. Use of ubiquinone Q10 according to claim 11, wherein said copolymer comprises about 70% of polyoxyethylene and has a HLB value of about 22.0

13. Use of ubiquinone Q10 according to claim 11 or 12, wherein said modified castor oil is polyethylene glycol glyceryl-triricinoleate.

14. A collyrium composition for topical ophthalmic use comprising, as components: ubiquinone Q10 by 0,01 up to 2,0% p/w; tocopherol by 0,005 up to 0,1% p/w; and a mixture including modified castor oil and a block copolymer of hydrophilic ethylene oxide and lipophilic propylene oxide having a prevailing proportion of polyoxyethylene, an average molecular weight between 10.000 and 13.000 Dalton and a HLB value higher than 15, in a quantity sufficient to solubilize said components in an aqueous solution.

15. A composition according to claim 14, comprising ubiquinone by 0,1 up to 1,0% p/w.

16. A composition according to claim 14, comprising ubiquinone by about 0,2% p/w.

17. A composition according to claim 14, comprising tocopherol by 0,01 up to 0,05% p/w.

18. A composition according to any of the claims 14 to 17, wherein said modified castor oil is polyethylene

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glycol glyceryl-triricinoleate.

19. A composition according to any of the claims 14 to 18 comprising in an aqueous solution, as components: ubiquinone Q10 by about 0,2% p/w; tocopherol by 0,02 up to 0,04% p/w; and a mixture including polyethylene glycol glyceryl-tryricinoleate and a block copolymer of ethylene oxide and propylene oxide having a proportion of polyoxyethylene by about 70%, an average molecular weight of about 12.000 Dalton and a 22 HLB value by 10 up to 15%.

20. A composition according to any of the claims 14 to 19, furthermore comprising, as auxiliary ingredients, pH correctors, buffer salts, antiseptics, complexants, antioxidants, synergizing agents and preservatives.

21. A process to produce a composition as claimed in any of the claims 14 to 20, comprising the steps of: melting the ubiquinone, the tocopherol, the block copolymer and the modified castor oil, at a temperature of 40 up to 80°C until obtaining a melt mass; adding water to the melt mass at the same temperature until obtaining a dispersion; fully solubilize said components under stirring.

22. A process according to claim 21, wherein said temperature is 60°C.

23. A process according to claim 21 or 22, wherein said auxiliary ingredients are added after solubilization.